treated with docetaxel-based chemotherapy. EQ-5D and FACT-P data were collected for a subset of patients at baseline and throughout the study until treatment discontinuation. We compared three statistical mapping techniques to estimate patients' EQ-5D index scores determined using the UK-tariff: (a) linear regression estimated by generalized estimating equation (GEE) algorithms; (b) two-part model (TPM) combining logistic and linear regression estimated by GEE algorithms; (c) separate mapping algorithms for patients with poor health defined as FACT-P ≤78. To select the best model specification, four different sets of explanatory variables were compared. The models were fitted to the full dataset and cross-validated using a 10-fold in-sample cross-validation. The variance explained by the model was assessed by the marginal R2. Model performance was assessed by comparing predicted and observed mean EQ-5D scores, the mean absolute error (MAE) and the root mean squared Error (RMSE). **RESULTS:** Values for both FACT-P and EQ-5D were available for 234 patients. The TPM model including the FACT-P sub-domain scores and demographic variables was the best-performing model (marginal R2 = 0.689) providing the most accurate predictions (MAE = 0.125; RMSE = 0.170). The physical well-being and prostate cancer specific subscales in the logistic part and functional and emotional well-being subscales in the linear regression part had the highest explanatory value. **CONCLUSIONS:** The developed algorithms for mapping FACT-P to EQ-5D enable the calculation of appropriate preference-based HRQoL scores for use in cost-effectiveness analyses when EQ-5D data are missing or inadequate

PHS66

OUTCOMES AND DETERMINANTS OF CAREGIVER BURDEN AFTER FIRST-EVER STROKE: THE ERLANGEN STROKE PROJECT (ESPRO)

Schaller SU, Weingärtner M, Kriza C, Niederländer C, Wahlster P, Kolominsky-Rabas P
University of Erlangen-Nuremberg, Erlangen, Germany

OBJECTIVES: Informal caregivers of stroke survivors provide extensive care which can be perceived as a burden. With regard to the high prevalence of stroke and increasing costs of care, limited attention is given to informal caregivers. The purpose of this analysis is to investigate specific caregiver burden outcomes 12 months after first-ever stroke and to identify determinants of caregiver burden. **METHODS:** Data were collected from the Erlangen Stroke Project among the 106,000 residents of the community of Erlangen, Germany. Analysis includes stroke survivors, followed-up 12 months after stroke as well as their informal, primary caregivers. The Caregiver Burden Scale (CBS) was used to assess caregiver burden. Explanatory factors of burden were examined in terms of socio-demographic data, functional status (Barthel Index, Frenchay Activity Index), hours per day provided for care, caregivers relationship to patient and health status. **RESULTS:** A total of 134 subjects were assessed prospectively. Mean age of caregivers is 62.9 years. Informal care is mainly provided by spouses (55.8%) and children (34.6%). 12 months after stroke, over one third of caregivers were experiencing considerable burden. Main burden of caregiving out of 15 dimensions (CBS) is reported for 'emotional support' (46.3%), 'dealing with behavioural difficulties' (38.8%) and for 'transport of the patient' (30.6%). Both, the degree of patients' physical disability ($p<0.001$) and the degree of patients' inactivity in activities of daily living ($p<0.01$) were significantly associated with a high level of experienced burden. The time of care per day provided by the caregiver is correlated positively with a higher caregiver burden ($p<0.001$). **CONCLUSIONS:** Results confirm that caregiver burden of stroke survivors is still an unmet need in terms of public health. Effective preventive and situation-specific strategies should be implemented, based on understanding the reported findings. (Data collection and management is supported by the German Federal Ministry of Health (BMG), Project ID: IIA5-2012-2512KEU305).

PHS67

RASCH MODEL VALIDATION OF A PEER RELATIONS SCALE FOR PEOPLE TREATED FOR PSYCHOACTIVE SUBSTANCE USE DISORDER

Ciesla J[1], Mazurek K[2]
[1]*Northern Illinois University, DeKalb, IL, USA,* [2]*University of Illinois, Champaign-Urbana, Champaign, IL, USA*

OBJECTIVES: There is strong evidence in the literature indicating that positive supportive peer relations are protective of relapse for people treated for psychoactive substance use disorder (PSUD). Unfortunately, no standard measure of peer relations exists. The objective of this research is to use Rasch item response theory (IRT) modeling to validate a 13-item peer relations scale for use in outcomes studies in this treatment population. **METHODS:** The participants are 408 adults (average age 36.4) discharged from primary substance abuse treatment (ASAM Level 1A) in 2004-2010. The data is from an outcome study conducted approximately six months post discharge via a 190-item questionnaire that included the 13-item peer relations scale. The scale is made up of behaviorally-anchored items that assess the degree to which peers conform to norms of positive behavior and are supportive of abstinence and recovery. The response rate was 58 percent. **RESULTS:** The person reliability is 0.98 and the Cronbach's alpha person raw score reliability is 0.92—both indicating the scale is internally consistent. The item reliability of 0.96 is high showing that the model is reliable. The real separation is 6.69 meaning items are placed appropriately on the Rasch "ruler" with about six levels of importance identified. The mean-square (MNSQ) statistic of the infit and outfit values were between 0.5 and 1.5 for all of the items indicating a low level of randomness and thus unidimensionality of the scale. Additionally, the scale is made up of four ordered thresholds. Visual inspection of a Wright Item Map shows the scale is hierarchically structured with a consistent amount of inter-item spread. Similarly, the standardized t-tests (Z-STD), shown on a pathway bubble chart indicate minimal item overlap. **CONCLUSIONS:** The Rasch analysis shows the peer relations scale is a reliable and unidimensional measure of an important PSUD treatment outcome.

PHS68

AN ASSESSMENT OF IMPAIRMENT OF PRODUCTIVITY AMONG SLE PATIENTS

Schneider M[1], Strand V[2], Nikaï E[3], Wood R[4], Smets E[3], Lobosco S[4]
[1]*Heinrich-Heine-University, Düsseldorf, Germany,* [2]*Stanford University, Portola Valley, CA, USA,* [3]*UCB Pharma, Brussels, Belgium,* [4]*Adelphi Real World, Bollington, Cheshire, UK*

OBJECTIVES: To assess the impact of SLE on productivity at various disease severity levels. **METHODS:** Data from France, Germany, Italy, Spain, UK and the US were extracted from the Adelphi Lupus Disease-Specific Programme,3a 2010 cross-sectional survey completed by 161 physicians (156 rheumatologists, 5 nephrologists) and 456 SLE patients. Patients reported their productivity in the Work Productivity and Activity Impairment (WPAI-Lupus) questionnaire. WPAI has four domains: absenteeism (% time missed from work), presenteeism (% impairment due to SLE while working), overall work impairment (% overall work impairment due to SLE) and activity impairment (% impairment in regular daily activities outside of work), higher numbers indicating greater impairment. Disease severity was physician-reported, based on overall perception of disease activity. **RESULTS:** Patients were predominantly female (87.7%). Their mean age was 39.8 years, and 55.5% were employed. Impairment in all four WPAI domains was reported, with a similar negative effect on both regular daily activities (outside work) and work productivity (27.3% and 25.1%, respectively). Levels of impairment in the four WPAI domains were compared for three levels of disease activity: mild, moderate and severe (as defined by rheumatologists). Moderate and severe patients were grouped together because few patients were classified as severe (n = 2–8 depending on the domain). In three of the four domains, greater disease severity was associated with greater productivity impairment. Impairment was greatest in the regular daily activities domain, where WPAI impairment increased from 21.41% to 40.73% for mild vs moderate/severe disease. **CONCLUSIONS:** The burden of SLE on productivity was considerable, with impairment across all WPAI domains. The most affected domain was regular daily activities. Increased disease activity was associated with greater productivity impairment in three domains. Further research is required to investigate the effect of other factors such as fatigue and pain on productivity in this population.

PHS69

IMPACT ASSESSMENT OF MINNESOTA MODEL FOR ALCOHOL REHABILITATION IN HOSPITALIZED PATIENTS

Tóth Á[1], Szikszay P[2], Sipos E[1], Boncz I[1], Jeges S[1]
[1]*University of Pécs, Pécs, Hungary,* [2]*Szigetvár Hospital, Szigetvár, Hungary*

OBJECTIVES: Evaluation of the method for assessing self-rated somatopsychic health of alcoholic patients treated according to the Minnesota model, and changes during the five-month hospitalization. **METHODS:** Self-report questionnaire was used to assess wellness status, vegetative lability, sense of coherence, general health status and health behaviour. Wellness status was measured by the Optimal Living Profile (OLP) questionnaire on a scale regarding environmental, intellectual, spiritual, emotional, social and physical health questions, vegetative lability on the Hennenhofer-Heil scale (VELA), and Sense of Coherence on Antonovsky's SOC scale minimized to 6 questions. Concurrent validity of the questionnaire was first assessed in a pilot study in alcoholic patients. Later patients receiving treatment at the Addictology Department of Szigetvár Hospital (Hungary) were asked to fill out the questionnaire before and after the therapy. For a statistical analysis of the data we used descriptive methods as well as correlation analysis and Wilcoxon tests. **RESULTS:** Cronbach's alpha values exceeded 0.75 in all cases and demonstrated no significant difference in the matching sample of non-alcoholics (regarding sex, age and education). Sample of hospitalized patients involved 51 patients (34 men, 17 women) with an average age of 46,1 years (SD 8,3, range 18–61). Compared to health and wellness status before the treatment a significantly positive change could be demonstrated both in dimensions of OLP and on VELA and SOC-scales. All cases showed $p < 0.001$ according to the Wilcoxon-test. **CONCLUSIONS:** The questionnaire used for impact assessment of the Minnesota model – concerning somatopsychic status of alcoholic patients- proved to be applicable. Results of the follow up were positive: somatopsychic and health status of the patients showed remarkable changes. Their intention to do more for their health has strengthened. Trust and belief in capabilities to improve health status concerning issues of spiritual, social and physical health has become stronger.

PHS70

HEALTH RELATED QUALITY OF LIFE AS PREDICTOR OF DEATH AMONG PATIENTS WITH HEART FAILURE

Escobar A[1], Bilbao A[1], Gonzalez-Saenz de Tejada M[2], Fernandez-soto M[3], Lafuente I[4], Sanchez-haya B[3], Citores L[1]
[1]*Basurto University Hospital (Osakidetza), Bilbao, Bizkaia, Spain,* [2]*Basurto University Hospital (Osakidetza) - CIBER Epidemiologia y Salud Pública (CIBERESP), Bilbao, Bizkaia, Spain,* [3]*Donostia University Hospital (Osakidetza), Donostia-San Sebastian, Gipuzkoa, Spain,* [4]*Galdakao-Usansolo Hospital (Osakidetza), Galdakao, Bizkaia, Spain*

OBJECTIVES: There are few studies which have examined the role of Health related quality of life (HRQoL) as independent predictor of death in patients with heart failure (HF). The Minnesota Living with Heart Failure Questionnaire (MLHFQ) is a specific instrument which has 21 items with an overall scale, physical (8 items) and emotional (5 items) subscales. The aim of this study was to evaluate the performance of HRQoL as predictor of mortality at 1-year adjusted by comorbidities, gender and age. **METHODS:** Prospective study with 556 patients admitted by HF in 5 Spanish Hospitals. Patients completed the MLHFQ during their hospitalization. MLHFQ items are scoring from 0 (best) to 5 (worse). Total score ranges from 0 to 105, physical domain from 0 to 40 and emotional from 0 to 25. Mortality was registered through hospital clinical records and Spanish National Death Index. We used mul-